

RAW SEQUENCE LISTING

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Application Serial Number: 10/583,127
Source: 1FWO
Date Processed by STIC: 7/27/06

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IFWO

RAW SEQUENCE LISTING

DATE: 07/27/2006

PATENT APPLICATION: US/10/583,127

TIME: 10:27:25

Input Set : A:\FS04-421PCT sequence list.ST25.txt

Output Set: N:\CRF4\07272006\J583127.raw

3 <110> APPLICANT: Two Cells. Co. Ltd

5 <120> TITLE OF INVENTION: Bactericide against Streptococcus mutans and Streptococcus
sobrinus

7 <130> FILE REFERENCE: PFS04-421PCT

C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/583,127

C--> 9 <141> CURRENT FILING DATE: 2006-06-16

9 <160> NUMBER OF SEQ ID NOS: 4

11 <170> SOFTWARE: PatentIn version 3.1

13 <210> SEQ ID NO: 1

14 <211> LENGTH: 979

15 <212> TYPE: PRT

16 <213> ORGANISM: Streptococcus mutans

18 <400> SEQUENCE: 1

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21 1 5 10 15

24 Met Ala Ala Asn Lys Ile Ser Ala Asp Glu Gln Asn Gln Ser Leu Ser

25 20 25 30

28 Ala Ser Glu Val Ile Ser Ser Asp Ala Thr Ser Val Ser Glu Leu Pro

29 35 40 45

32 Ala Thr Thr Ala Gln Ile Ser Gln Glu Val Arg Asn Asn Gly Gln Asp

33 50 55 60

36 Ser Thr Ile Gln Leu Gln Gln Thr Gln Glu Gln Ser Asp Pro Ile Thr

37 65 70 75 80

40 Ser Thr Ser Glu Thr Thr Val Ser Ser Met Lys Ala Val Thr Asn Gly

41 85 90 95

44 Ser Pro Ala Lys Ala Asn Glu Thr Glu Thr Val Pro Ser Gln Ala Ser

45 100 105 110

48 Thr Ala Ser Ser Val Gln Thr Pro Asp Gln Ile Ser Thr Val Pro Ser

49 115 120 125

52 Val Lys Ala Glu Thr Thr Ser Thr Ala Asp Gln Leu Gln Ser Thr Ser

53 130 135 140

56 Ser Ala Pro Leu Asp Gln Gln Thr Asp Ala Lys Arg Leu Ser Asn Lys

57 145 150 155 160

60 Met Thr Pro Ala Ser Ser Val Gln Ala Arg Ser Ser Leu Thr Gln Asp

61 165 170 175

64 Lys Gln Val Gln Ala Gln Glu Val Thr Ser Ala Val Val Glu Glu Lys

65 180 185 190

68 Gly Ile Lys Leu Gln Tyr Asn Gly Gln Ile Ala Arg Asn Thr Lys Ile

69 195 200 205

72 Gln Phe Ala Val Trp Ser Ala Arg Asn Asp Gln Asp Asp Leu Gln Trp

73 210 215 220

76 Tyr Thr Ala Asn Asn Met Gly Ala Ala Tyr Ala Glu Phe Lys Asn His

77 225 230 235 240

80 Arg Glu Tyr Gly Thr Tyr Tyr Val His Thr Tyr Ala Asn Gln Asn Gly

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81		245		250		255
84	Lys Met Ile Gly Leu Asn Ala Thr Thr Leu Thr Ile Ala Gln Pro Gln					
85		260		265		270
88	Val Gln Thr Asn Ile Gln Arg Lys Ser Ala Thr Asn Phe Glu Leu Thr					
89		275		280		285
92	Val Ser Asn Val Pro Asn Thr Ile Ser Ser Ile Met Val Pro Val Trp					
93		290		295		300
96	Ser Asp Gln Asn Gly Gln Asp Asp Ile Lys Trp Tyr Asn Ala Arg Lys					
97	305		310		315	320
100	Ala Asp Asp Gly Ser Tyr Lys Ala Leu Ile Asp Thr Lys Asn His Lys					
101		325		330		335
104	Asn Asp Leu Gly His Tyr Glu Ala His Ile Tyr Gly Tyr Ser Thr Val					
105		340		345		350
108	Thr Gln Ser Gln Ile Gly Leu Ala Val Ser Ser Gly Phe Asp Arg Asn					
109		355		360		365
112	Asp Thr Arg Pro Asn Ala Arg Ile Ser Val Ala Asp Tyr Asp Gln Asn					
113		370		375		380
116	Lys Thr Thr Phe Asp Val Val Val Glu Gly Ser Ser Asp Thr Lys Thr					
117	385		390		395	400
120	Val Ser Ala Val Asn Ile Ala Val Trp Ser Glu Asp Lys Gly Gln Asp					
121		405		410		415
124	Asp Leu Lys Trp Tyr Ser Pro Lys Ile Val Asn Asn Lys Ala Thr Val					
125		420		425		430
128	Thr Ile Asn Ile Ala Asn His Ser Asn Thr Ser Asp Lys Tyr Asn Val					
129		435		440		445
132	His Val Tyr Thr Asp Tyr Thr Asp Gly Thr His Ser Gly Thr Ile Leu					
133		450		455		460
136	Gly Ala Tyr Gln Ile Asn Lys Pro Leu Glu Lys Asn Thr Val Ser Ala					
137	465		470		475	480
140	Asp Leu Thr Ser Asp Gly Ile Ala Leu Lys Leu Asp Ser Asn Thr Val					
141		485		490		495
144	Thr Asp Tyr Thr Lys Val Arg Phe Ala Val Trp Ser Asp Gln Asn Gly					
145		500		505		510
148	Gln Asp Asp Leu Lys Trp Tyr Ser Ala Asn Ser Asp Gly Ala Ala Thr					
149		515		520		525
152	Ala Ala Tyr Ser Asn His Ser Gly Tyr Gly Leu Tyr His Ile His Thr					
153		530		535		540
156	Tyr Ile Ile Lys Asp Gly Glu Met Val Gly Leu Asn Gly Arg Thr Ile					
157	545		550		555	560
160	Thr Ile Asn Gln Pro Ser Ala Lys Val Asp Ile Ala Lys Glu Ser Asp					
161		565		570		575
164	Ala Leu Tyr Lys Val Thr Val Ser Asn Leu Pro Ala Tyr Ile Ser Ser					
165		580		585		590
168	Val Ala Ile Pro Val Trp Thr Asp Lys Asn Asn Gln Asp Asp Ile Gln					
169		595		600		605
172	Trp Ile Leu Ala Thr Lys Gln Gly Asp Gly Thr Tyr Ala Ala Gln Ile					
173		610		615		620
176	Gln Leu Ala Asp His Asn Gly Glu Thr Gly His Tyr Asn Val His Val					
177	625		630		635	640

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180 Tyr Gly Gln Ser Lys Phe Asp Asn Lys Thr Val Gly Leu Ala Ala Thr
181          645          650          655
184 Asp Gly Phe Asn Val Ala Glu Thr Arg Asn Ala Val Ile Ala Ala Ser
185          660          665          670
188 Asn Tyr Asn Ala Ser Ala Gly Thr Ile Asp Met Ile Val Lys Gln Glu
189          675          680          685
192 Ala Gly Gly Lys Ala Ile Lys Glu Val Arg Ile Ala Ala Trp Ser Glu
193          690          695          700
196 Ala Asp Gln Ser Asn Leu His Trp Tyr Val Ser Ser Thr Ile Ile Asp
197 705          710          715          720
200 Gly Lys Val Thr Val Thr Ile Asn Glu Lys Asn His Gln Tyr Ile Lys
201          725          730          735
204 Gly Asn Tyr Asn Ile His Val Tyr Val Asp Tyr Thr Asp Gly Thr Ser
205          740          745          750
208 Ser Gly Thr Asn Ile Gly Asn Tyr Ser Leu Asn Ala Asp Lys Pro Ala
209          755          760          765
212 Val Ala Leu Pro Ser Tyr Phe Ile Asp Ile Ser Ser His Asn Gly Ile
213          770          775          780
216 Ile Ser Val Ala Glu Phe Asn Ser Leu Lys Gln Gln Gly Ile Gln Gly
217 785          790          795          800
220 Val Val Val Lys Leu Thr Glu Gly Thr Ser Tyr Ile Asn Pro Tyr Ala
221          805          810          815
224 Ser Ser Gln Ile Ala Asn Ala Arg Ala Ala Gly Ile Lys Val Ser Ala
225          820          825          830
228 Tyr His Tyr Ala His Tyr Thr Ser Ala Ala Gly Ala Gln Glu Glu Ala
229          835          840          845
232 Arg Tyr Phe Ala Asn Ala Ala Arg Ser Phe Gly Leu Glu Ala Ser Thr
233          850          855          860
236 Val Met Val Asn Asp Met Glu Glu Ser Ser Met Val Asn Asn Ile Asn
237 865          870          875          880
240 Asn Asn Val Gln Ala Trp Gln Asp Glu Met Arg Arg Gln Gly Tyr Ser
241          885          890          895
244 Asn Leu Ile His Tyr Thr Met Ala Ser Trp Leu Asp Ile Arg Gly Gly
245          900          905          910
248 Gln Val Asp Thr Ala Arg Phe Gly Ile Asn Asn Phe Trp Val Ala His
249          915          920          925
252 Tyr Ala Lys Gly Tyr Thr Tyr Met Thr Gln Glu Glu Ala Lys Ser Leu
253          930          935          940
256 Asn Tyr Tyr Ala Asn Ala Ala Ala Trp Gln Tyr Thr Ser Val Ser Ser
257 945          950          955          960
260 Lys Leu Ser His Ala Leu Asp Glu Asn Ile Asp Tyr Thr Gly Arg Phe
261          965          970          975
264 Thr Gln Gln
268 <210> SEQ ID NO: 2
269 <211> LENGTH: 2940
270 <212> TYPE: DNA
271 <213> ORGANISM: Streptococcus mutans
273 <400> SEQUENCE: 2
274 atgaaaagca aaacttattt gatgattcca ttagcattga ccctatttat ggctgcta

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276 aaaatatctg cagatgagca aaatcaatcc ttaagtgcac cagaagttat ttcttctgat 120
278 gcgacatcag tatctgaatt accagcgaca acagcacaga taagtcagga agtcagaaat 180
280 aatggacaag acagtactat tcaattgcag caaacacagg aacagtctga tccgataaca 240
282 agtacgtctg agacaactgt ttctctctatg aaggcgggtca caaatggctc acctgccaaa 300
284 gcaaatgaga ctgaaacagt tccgtctcag gcaagtactg ctagtctctgt gcagactcct 360
286 gatcagattt cgactgttcc ctctgtaaaa gcagaaacca cttctaccgc agatcaatta 420
288 caatcaacat catctgctcc tttggatcaa caaatgatg ctaaacgtct ttccaataaa 480
290 atgactccag caagcagcgt acaagctcgt tcttctctta cacaagacaa gcaagtacag 540
292 gcacaggaag tcacaagtgc tgtagtggaa gaaaaaggga ttaagctaca gtataacggg 600
294 cagatcgctc gaaatactaa gattcaattt gctgtctggg cagctcgaaa tgatcaagat 660
296 gatcttcaat ggtatacggc aaataatatg ggagcggcct atgctgaatt caagaatcat 720
298 cgtgagtatg ggacctatta tgttcatact tatgctaata aaaatggcaa gatgatagga 780
300 cttaacgcaa caactcttac aattgctcaa cctcaggtgc aaactaatat tcaaagaaaa 840
302 tcagcaacga attttgagtt aaccgtttct aatgttccta atactattag cagcatcatg 900
304 gtacctgtct ggtcagatca aaacgggtcaa gatgatatta aatgggtataa tgcccgaag 960
306 gctgatgatg gcagttataa ggctttgatt gatactaaaa atcacagaa tgatttgga 1020
308 cattatgaag ctcatattta cggctacagc acagtaaccc agtctcaaat tggcttagct 1080
310 gttagttctg gttttgaccg caatgatact agaccaatg caaggatata tggtgctgat 1140
312 tatgacaaa ataaaacgac ctttgatgtt gtgttgagg gttcatctga taaaagact 1200
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316 tattcaccaa aaattgtcaa caataaggca actgtgacga ttaatatcgc taatcattca 1320
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328 catatccata cttatattat taaagatggg gaaatgggtg ggcttaatgg cagaacgata 1680
330 actattaatc agcctagtgc caagggtgat attgctaaag aatccgatgc tctttataaa 1740
332 gtgactgttt ctaacctgcc agcttacatt agttcagtag ctattcctgt ctggacagat 1800
334 aaaaacaatc aagatgatat tcaatggatt ctgcgcgaca aacaagggtg tggaaacctac 1860
336 gcagcgcaaa ttcagttagc tgatcataat ggggaaacag gccattataa tgttcatgtc 1920
338 tatggacaaa gttaaatttga caataaaacg gttggcttag cagcaactga tggctttaat 1980
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348 attcatgtct atgttgatta tactgatggc actagtagcg gaaccaatat tggaaactat 2280
350 agcttgaatg ctgataaacc tgctgttgct ctgccatctt actttattga tattagtagc 2340
352 cacaatggaa tcatttctgt tgccgaattc aatagcttga aacaacaagg tattcaagga 2400
354 gtggttggtta agttaacaga aggtacaagc tacatcaatc cttatgcaag ttctcaaatt 2460
356 gccaatgcca gagctgccgg tattaagggt tctgcttacc actatgctca ctatacttct 2520
358 gcggctgggg cacaagaaga agcccggtat tttgctaata cagccagatc ctttggtttg 2580
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364 tatactatgg ctagttaggt ggatatacgc ggtgggcaag tagacactgc aaggtttggc 2760
366 atcaataatt tttgggttgc tcattatgcc aaagggtata cttatatgac tcaagaagaa 2820
368 gctaaatccc ttaattatta tgctaatagc gcagcttggc agtatactag tgtatcgtct 2880
370 aaattgtctc atgctttgga tgaaaatatt gattatactg gtcgatttac tcaacagtaa 2940
373 <210> SEQ ID NO: 3

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374 <211> LENGTH: 20
375 <212> TYPE: DNA
376 <213> ORGANISM: artificial sequence
378 <220> FEATURE:
379 <223> OTHER INFORMATION: primer
381 <400> SEQUENCE: 3
382 agttcctgcc atactactgt 20
385 <210> SEQ ID NO: 4
386 <211> LENGTH: 28
387 <212> TYPE: DNA
388 <213> ORGANISM: artificial sequence
390 <220> FEATURE:
391 <223> OTHER INFORMATION: primer
393 <400> SEQUENCE: 4
394 caggatccgt acaagctcgt tcttctct 28

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/583,127

DATE: 07/27/2006

TIME: 10:27:26

Input Set : A:\FS04-421PCT sequence list.ST25.txt

Output Set: N:\CRF4\07272006\J583127.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date